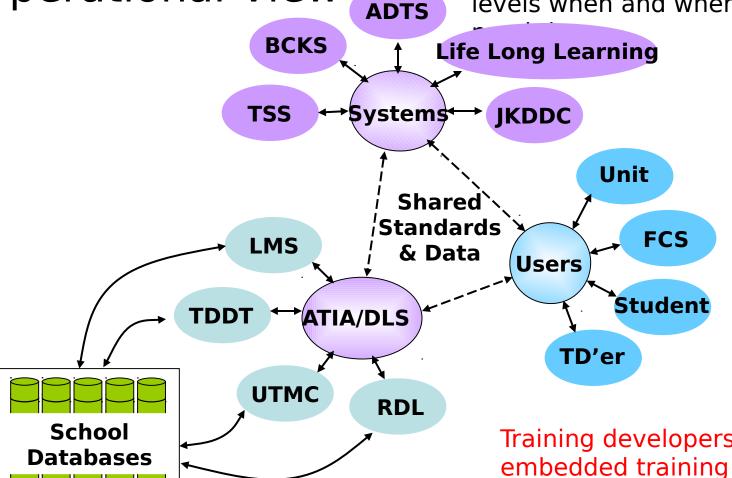


Information
Architecture (ATIA)
Operational View

Systems, users & training tools sharing common standards & data allow relevant, reusable data to be accessed by users on all levels when and where they



Training developers, students, embedded training systems and units can all access the same data from the same

The Foundation of Life-long Learning

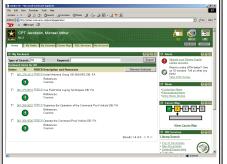




Learning Management Homepage System (LMS)



Soldier Training (aka RDL)



Unit Training Management **Configuration** (UTMC)





DL Courseware Training Mgmt. Resident

MTP **GTA** Career Map FM

METL Training Schedule Admin

Common Core Services

Digital Library / Data Repository

What is BCKS?

Battle Command Knowledge System (BCKS) Is a networked system of Structured Professional
Forums (SPFs) providing agile dominant Learning,
Teaching and Battle_Command capabilities to produce
high performing Commander/Leader Teams (CLTs).

Warfighting Effectiveness = $f(D + O + M) \times$

 $(S \times L)$

S: Soldiers

L: Leaders

D: Doctrine T: Training
O: Organization E1: Education
M: Materiel E2: Experience

Why BCKS?

Operational Requirements

- Improved war-fighter / unit effectiveness
 - Rapidly generate self-aware and adaptive leaders as well as high-performance leaders/teams
- Quickly & effectively capture and share war-fighting experience / knowledge
 - Through networked Structured Professional Forums (SPFs)
 and virtual leader teams
- Agile, Responsive Institutions
 - Rapid turn-around of lessons learned, doctrine, TTPs, training, and leader development products
 - Integration with lifelong learning

Battle Command Knowledge Network System (BCKS)



BCKS is the overarching system and mechanism that provide the soldier/leader with transformational learning and teaching capabilities necessary to achieve decision dominance

BCKS (New) = WKN (Old) + Army
Training Information (ATIA) +
Embedded Training within a Battle
Command Framework

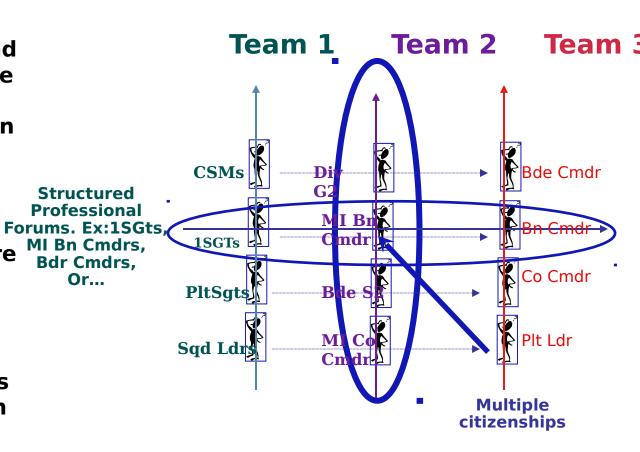
Structured **Professional** Forums **Supporting Commander/ Leader Teams**

by "Double Knit" to Superior Battle Command

Or...

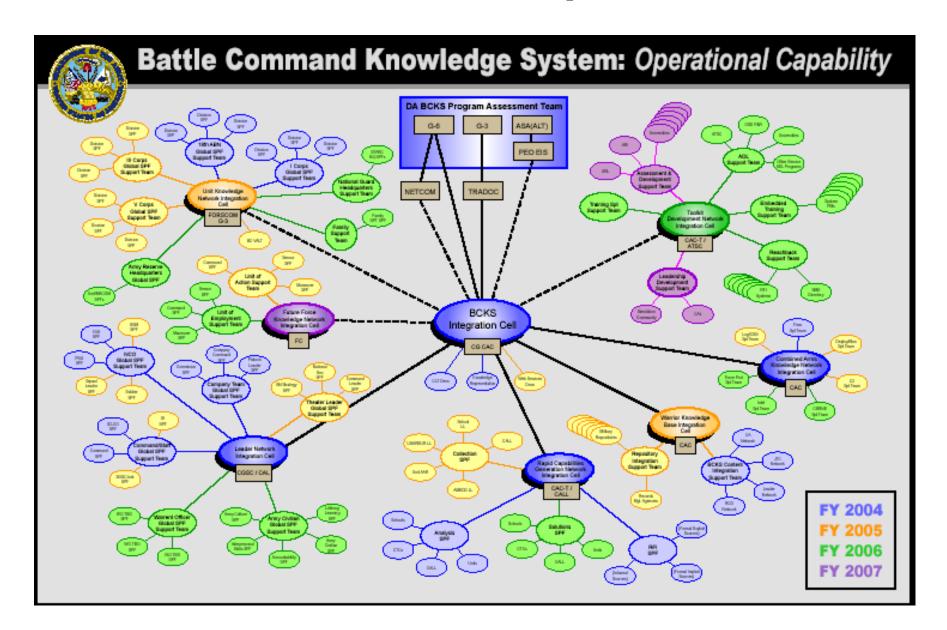
Structured Professional Forums Interact with and support through "double knit" learning and teaching the preparation of high-performing **Commander / Leader** Teams exercising battle command. All forums and teams are virtual, sometimes grouped.

"Double knit" translates the interest and passion of professional discussion into support of the authorities and responsibilities of Commander / Leader



Chain of command: Bde -Team3 Chains of Functional Support: IEW -Team 2, NCO -Team 1

BCKS Organizational & Functional Concept



Army Training Information **Architecture**

Current **Future Force**

Force

TRAINING DELIVERY **Graphic Aids Doctrine** Correspondence Courses The Army Training MTP/STP Drills



Legacy to Reengineered

EY 02 - 04

TASK DATA

TRAINING DEVELOPMENT

Individual Tasks Collective Tasks

Training Plans

Schoolhouse Curriculum **STUDENT**

ommon Data

Source

PEOPLE

FACILITIES AMMO

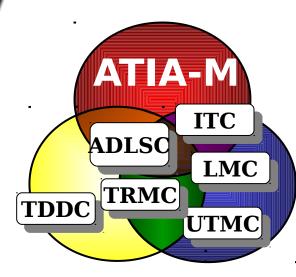
ADMIN

TRAINING **MANAGEMENT**

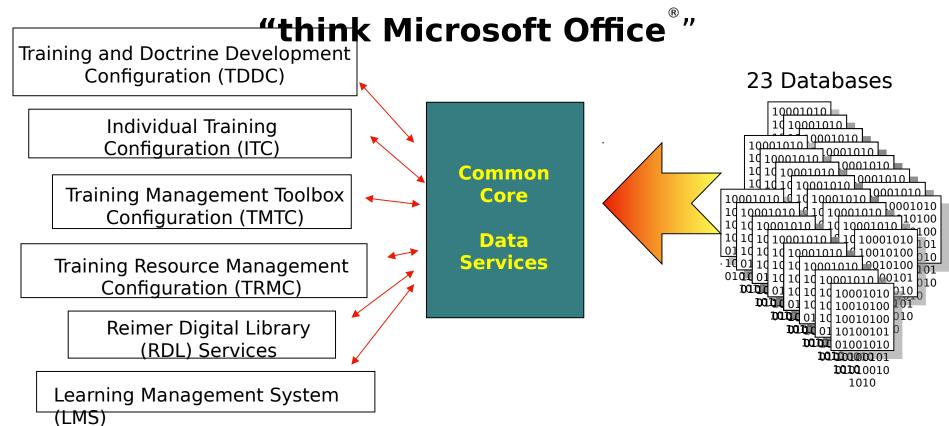
> Students Courses **Testing**

AIMS-R RECBAS

TNG Meterial **Gradebooks** Schedules



Architecture

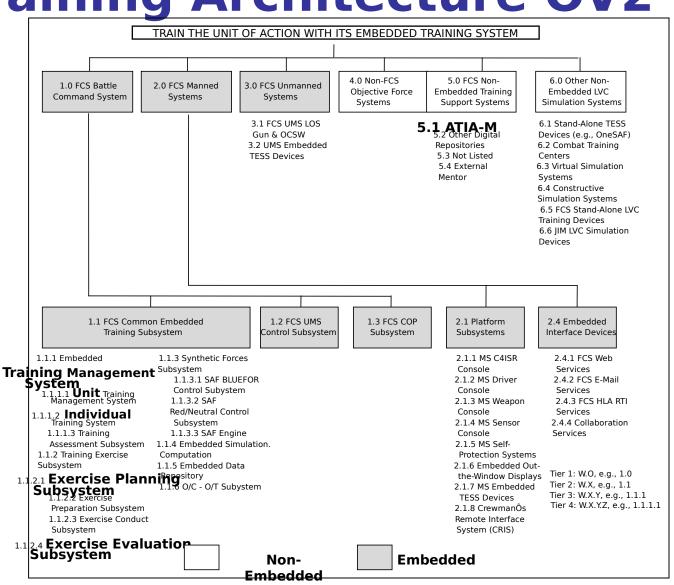


- ATIA: Consolidates existing systems (SATS, ASAT, TREDS, etc)
- Provides web-based approved training and doctrine materials (TSPs, MTPs, etc)
- Enhances training productivity by sharing information and use of object based,
 - reusable data
 - Provides a common training application toolset for the entire

RequirementsATIA-M ContributionS Training Architecture OV2

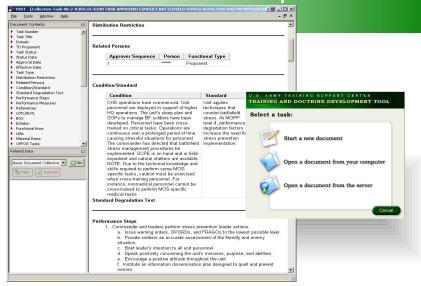
Meeting

- Links to Digital Repository Reimer Digital Library
- Training Management
 - Unit
 - Individual
- Exercise Planning/Evaluation
 - METL, Training Objectives
 - AAR, OTB
- Training Development Software Tool Set
 - MTPs,TSPs (Indiv/Collective,
 - IETMS/ Job Aids/Courses





Training and Doctrine Development Tool



Provides Training Developers the tools to -

- Manage individual and collective training
- •Supports the analysis and development of task based training

Products -

- Soldier Training Publications
- Mission Training Plans
- Combined Arms Training Strategies

Programs of Instruction, and courses
 U.S. Army Training Support Center

Army Training Information
Systems Directorate

ATTN: ATSC-ATISD, Bldg 2785

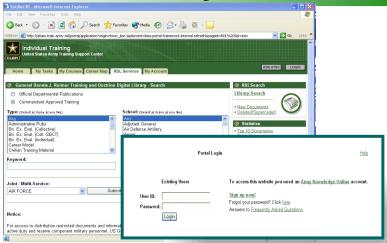
Fort Eustis, VA 23604 DSN: 826-4166 (ext 7044) COM: 757-878-4166 (ext 7044)



Soldier's

Training Home

www.train.army.mil



Provides Soldiers with all of their individual and collective training needs -

- · Web-based
- Uses AKO log-in
- Linked to Training Institutions

The **Soldier's Training Home Page** has four specialized functional pages plus a direct link to the *REIMER DIGITAL LIBRARY*.

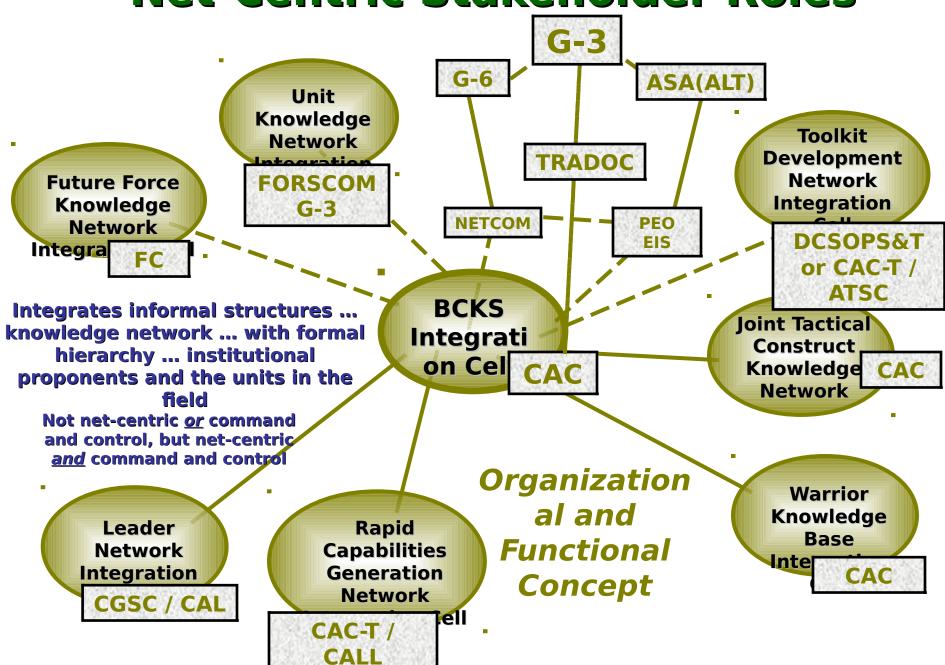


Accessible at home, at work, or in the field.

Demo

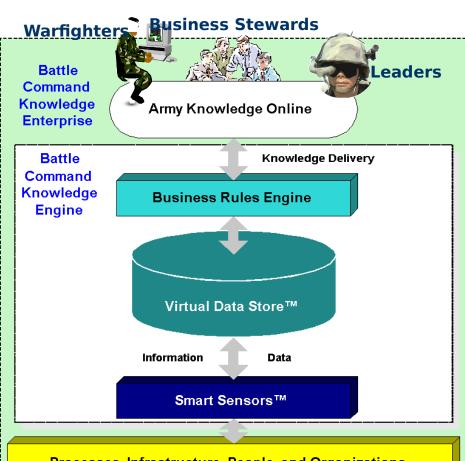
Backup

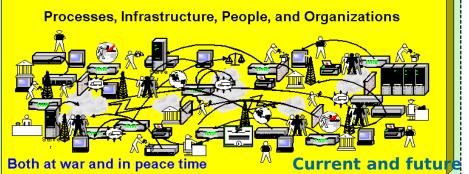
Net-Centric Stakeholder Roles

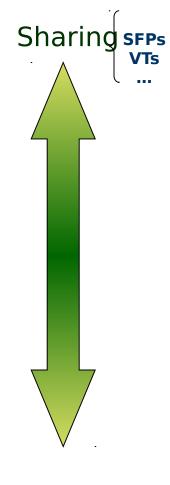


BCKS Knowledge Enterprise





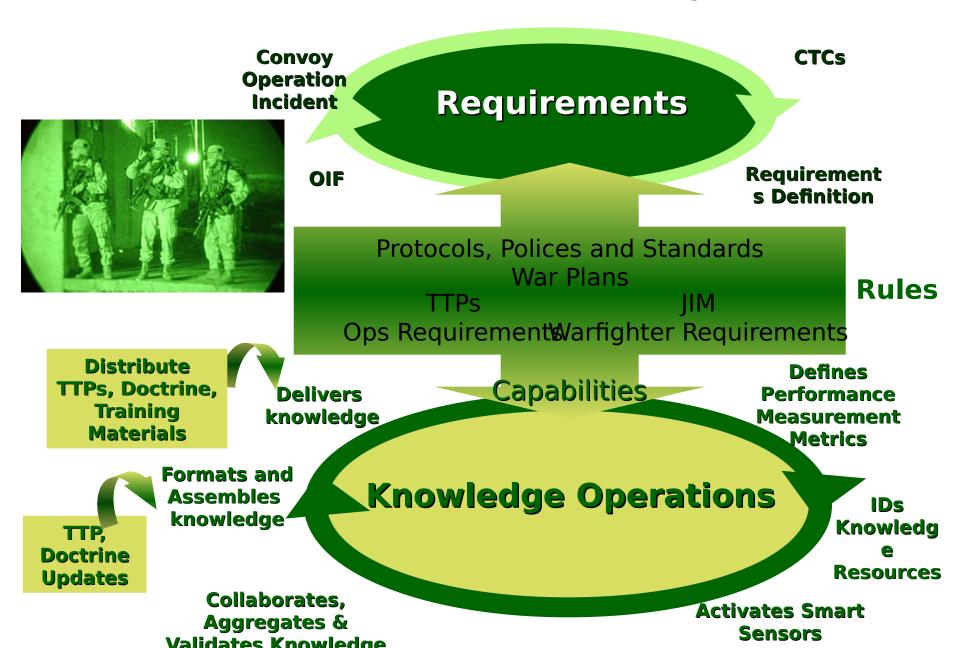




Leveraging

Rapidly Develop the Virtual Battle Book

via The BCKS Rule Engine



Purpose

To provide a collective training system that:

- Develops relevant unit training products
- Facilitates rapid change of training products to sustain relevancy
- Minimizes redundancy; focus TD efforts to reduce Proponent workload
- Provides common tasks, conditions, & standards
- Links tasks and standards to CALL lessons and TTP
- Accommodates modular training product requirements without high costs
- Allows commanders to quickly develop METL tailored MTPs
- Facilitates a commander's rapid development of training plans
- Supports unit and soldier training to execute non-branch / MOS tasks

Supporting an Army in Transition



MCO







Operational Ar

Single Point AccesTTPs / LL Unit Tng Strategies

Integrated, Responsive, Relavant & Accessible Tng Products

The Solution

Change Input

- •CALL Ops
- •CTC BOS Reps
- CALL Embeds
- Unit

CAC-T (CTD)

- Enforce task proponency
- •Eliminate redundant tasks
- Standardize TC&S
- Link Coll & Indiv tasks
- CATS mission focused & task-based

Developers

- CAC Integrates
- CADD
- •19 Branch Proponents
- •32 Schools



One TD ATIA Database Linked to CALL

- Common tasks
- Cover all ODSS Tasks
- Link UJTL, AUTL, Coll& Indiv tasks
- Link tasks to CALL TTP
- No paper MTPs, integrated into CATs
- Quick turn around cycle sustains relevance



Concept

Soldier
enters
"Secure
Route" into
search
engine

Search Results
Collective Training Strategy
123
"Route Clearance"

Task-Conditions-Standards
"Nested"

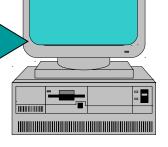
>Collective Task

Each task linked to own TC&S

wehnade

Each task linked to CALL TTP Archive

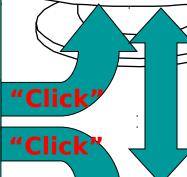
Results In



ATSC db

Support Task#456:

- Task
- Conditions
- Standards
- Resources
- TSP & Doctrine links
- •CALL TTP Archive



CALL db

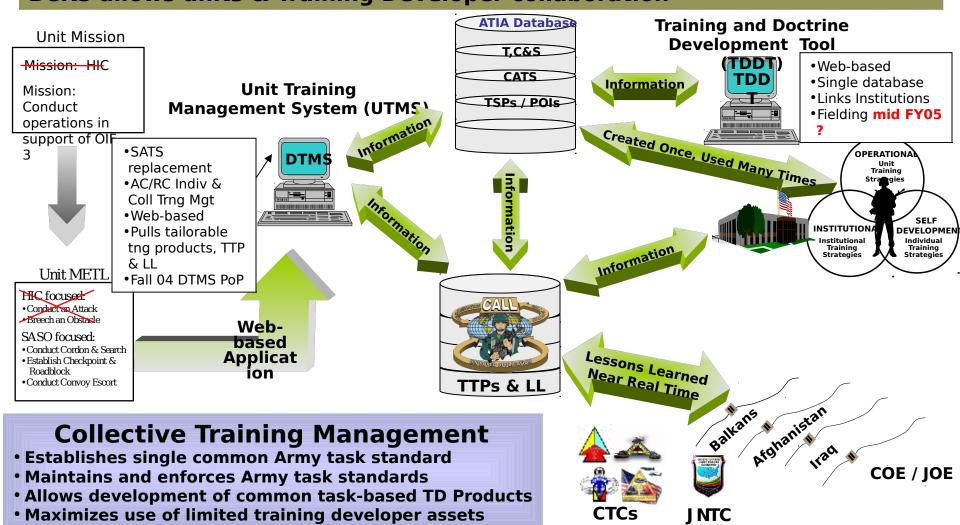
Task#123:

List CALL URLs to access latest TTP

- Articles
- Newsletters
- Interviews

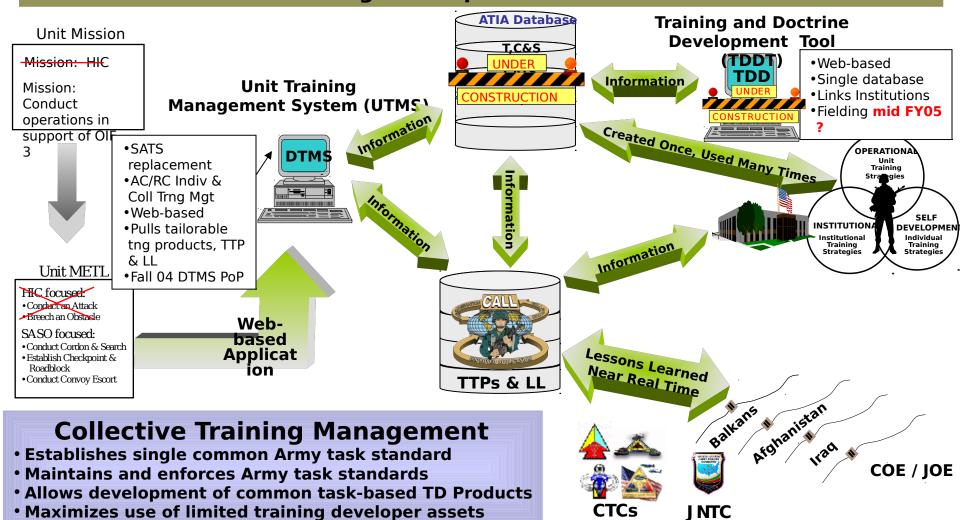
Future: METL drives Unit Tailored Training

Proponents build tailorable tasks with TDDT; Units build METL-based unit MTPs; UTMS pulls Task, Condition, Standards, TSPs and Training Strategies, linked to CALL TTPs and LLs, from a single ATIA database; BCKS allows units & Training Developer collaboration



Future: METL drives Unit Tailored Training

Proponents build tailorable tasks with TDDT; Units build METL-based unit MTPs; UTMS pulls Task, Condition, Standards, TSPs and Training Strategies, linked to CALL TTPs and LLs, from a single ATIA database; BCKS allows units & Training Developer collaboration



Interim Solution: ASAT

One consolidated ASAT database, managed by CAC that delivers Training Products to a single access point.

Unit Training Management System (UTMS) OPERATIONA Unit INSTITUTIONA DEVELOPMEN Individual Institutional Training Training Information ASAT db Lessons Learned Near Real Time TTPs & LI Afghanistan Balkans <u>Advantages</u> + Centrally managed, disciplined + Delivers Unit CATS COE / JOE + Leverages current work for future requirement **CTCs INTC**

Disadvantages

- + Develops Business Rules

+ Proactive vs Reactive

- + Provides proponents consolidated database
- Uses legacy system + Data in database is near real time
 - Front loaded manpower requireme

The Stakeholders

<u>Who</u>	<u>Position</u>	CAC: Strategy
HQDA G3	TOE based CATS drive OPTEMPO resource modelsATIA & Unit Tng Mgt Proponent	✓ Demonstrate how modular CATS reduces development cost and supports HQDA OPTEMPO models
Field Units / MACOMs TRADOC HQ, DCSOPS&T	 Need relevant, tailorable tng products and functional Unit Tng Mgt System Provides resource & mgt oversight does not manage training products 	 ✓ Build a Unit Tng Mgt System (UTMS) Co-Chair UTMS Req Control Board Conducts DTMS Proof of Principal ✓ Use BCKS to link Unit and School
CAC	•ATIA Functional Proponent	Tng Developers (TD)
	Responsible for integrationLimited TDers, no mgt constructUnit Tng Mgt Functional Proponent	✓ Manage training & doctrine products- Approve unit tng support products
Proponents / Branch School ATSC	Sounds approves all tng products TOE, Branch focused MTPs & tasks TD positions could be at risk	- Focus TD efforts to reduce redundancy
71130	 ATIA Software developer Owns Reimer Digital Library TDDT well behind delivery 	- Integrate full spectrum, JIM, & CA into task-based products ✓ Provide ATIA forcing function

Cost & Savings

Today

- 33 ASAT Databases and support staff
- 400 MTP & 141 STPs available in hard copy & digital text format
- 17,000+ collective tasks & 19,000+ individual tasks
- Collective and individual tasks not linked
- Many portals to search for tng products and information
- Redundant branch-focused training development efforts
- High training development workload, cannot sustain relevant training products
- Units reject SATS as a unit tng mgt system

Tomorrow

- 1 TDDT/ATIA database centrally managed reduces support staffs
- 0 hard copy MTP & STPs, all task managed from a central database
- 800 1500 common collective tasks & 10,000-15,000 individual tasks
- Linked AUTL, collective & individual tasks to drive institutional POIs
- One portal access, to a single database
- CA & JIM integrated tng products support multiple unit requirements
- Focused training development workload allows sustainment of selected relevant products
- MACOMs support DTMS PoP and follow on unit tng mgt system

200

200

6

Way Ahead

- •CAC CG: Message to Branch Proponents and School Commandants ref change:
 - CAC Training product management
 - Reinforce Proponent responsibilities
 - Standardization of tasks, conditions, and standards in a single database
 - Phase-out of MTPs
- •CTD (as CAC Collective Training Proponent): ICW Branch Proponents and School Commandants:
 - Establish Interim ASAT database to execute interim solution
 - Assign proponency to reduce number of collective and individual tasks to reduce redundancy
 - Link individual tasks to collective tasks
 - Develop task-based / modular unit training strategies
 - Conduct DTMS PoP; if successful, field as Unit Training Management System
- ATSC: ICW CTD and CALL:
 - Establish a single ATIA compliant database and training development tool.
 - Ensure that task and training strategies link to the CALL TTP and LL database

Summary

- Fewer common tasks drive Combined Arms / Joint Focused training development.
- Mission-focused, task-based training strategies allow modular organizations to easily build just-in-time unit training plans
- CAC's collective training management focuses limited resources to provide relevant and timely training products to units and institutions.

Savings, relevance, and utility justify change